Castle Creek – Futile Call

Futile Call Test #1 - This test was conducted April 15th through May 6th 2014.

Several days prior to the test, a flow of 1.7 cfs bypassed the upper diversion and water was running in the creek bed continuously to the lower diversion.

For 15 days beginning April 15th, an average flow of 0.55 cfs was left in the creek at the upper diversion. The water was not taken at the upper diversion so that that the bypassed flow could augment flow at the lower diversion. In total 8.3 AF bypassed the upper diversion during the 15 days.

April 11th through April 14th, 1.52 cfs or 3 AF per day had been diverted by the lower user. During the 15 days of the test, 1.36 cfs or 2.7 AF per day were diverted by the lower user. On the 16th day, no more water was released at the upper diversion to augment flows at the lower diversion. On the 16th day 1.35 cfs or 2.7 AF were diverted by the lower user. On days 17 through 22 of the test 1.35 cfs or 2.7 AF per day were diverted by the lower user.

Conclusion: In spring temperatures, at the tail end of snow runoff, 8.3 AF was bypassed over a fifteen day period at the upper diversion in order to augment flows at the lower diversion. Flow at the lower diversion initially decreased slightly (0.3 AF per day). Flow at the lower diversion remained constant at 2.7 AF per day throughout the 15 days of sending water from the upper diversion point. At this point the upper user diverted all the water and no flow was bypassed to augment flow at the lower diversion. Flow at the lower diversion remained constant at 2.7 AF per day throughout the next seven days at which point the continuous measurement was stopped. Although 8.3 AF was released to augment available water at the lower diversion, no augmentation in flow at the lower diversion was detected.

Futile Call Test #1 Data

Date	Lower Diversion cfs	Augmentation Flow bypassed at upper diversion (cfs)	Cumulative total Augmentation water (AF)	Other Bypass (cfs)	Total other Bypass (AF)
3/31	2.07	0	0.0	1.7	3.4
4/1	2.07	0	0.0	1.7	6.7
4/2	2.07	0	0.0	1.7	10.1
4/3	2.07	0	0.0	1.7	13.5
4/4	2.07	0	0.0	1.7	16.8
4/5	2.07	0	0.0	1.7	20.2
4/6	2.07	0	0.0	1.7	23.6
4/7	2.07	0	0.0	1.7	26.9
4/8	2.07	0	0.0	1.7	30.3
4/9	1.93	0	0.0	1.7	33.7
4/10	2.03	0	0.0	1.7	37.0
4/11	1.52	0	0.0	1.7	40.4
4/12	1.52	0	0.0	0	40.4
4/13	1.52	0	0.0	0	40.4
4/14	1.52	0	0.0	0	40.4
4/15	1.39	0.55	0.6	0	40.4
4/16	1.39	0.55	1.1	0	40.4
4/17	1.35	0.55	1.7	0	40.4
4/18	1.35	0.45	2.1	0	40.4
4/19	1.35	0.45	2.6	0	40.4
4/20	1.35	0.45	3.0	0	40.4
4/21	1.35	0.45	3.5	0	40.4
4/22	1.35	0.45	3.9	0	40.4
4/23	1.35	0.45	4.4	0	40.4
4/24	1.35	0.55	4.9	0	40.4
4/25	1.35	0.55	5.5	0	40.4
4/26	1.35	0.55	6.0	0	40.4
4/27	1.35	0.78	6.8	0	40.4
4/28	1.35	0.78	7.6	0	40.4
4/29	1.35	0.76	8.3	0	40.4
4/30	1.35	0	8.3	0	40.4
5/1	1.36	0	8.3	0	40.4
5/2	1.32	0	8.3	0	40.4
5/3	1.34	0	8.3	0	40.4
5/4	1.35	0.00	8.3	0.55	41.5
5/5	1.36	0	8.3	0	41.5
5/6	1.37	0	8.3	0	41.5